

### **REMARKS**

Applicants submit the above presented amended claims in response to the October 1, 2002 Final Office Action issued in the parent application U.S. Serial No. 09/981,393 filed October 16, 2001.

The amended drawings are submitted herewith in response to the draftsman's opposition in the October 1, 2002 Final Office Action issued in the parent application U.S. Serial No. 09/981,393 filed October 16, 2001. Amendments are clerical and therefore do not introduce new matter to the application and their entry is respectfully requested.

Amendment to the title removed the word "novel" and is intended to make the title to comply with the accepted practice at the U.S. PTO, and therefore it does not introduce new matter. Entry of this amendment is respectfully requested.

The preamble of claim 1 is amended to refer to a measurement of "alteration" of recoding. Support for this amendment can be found throughout the specification and particularly, for example, on page 15, last sentence of the second full paragraph.

Claims 1 and 5-8, and 14-16 are amended by deleting the phrase "suspected of causing recoding" and substituting it with a phrase "causing recoding." The amendment is supported by the specification as a whole.

Claims 1 and 8 are further amended to specify that the nucleic acid cassette comprises a "a translational reading frame consisting of an MHC I restricted epitope encoding sequence." The amendment is clerical to because the epitope itself cannot be inserted to a nucleic acid cassette.

Step e) of claim 1 is amended to indicate that the determination of the efficacy of the compound to alter recoding is performed using control cells, wherein no compound has been

added. Support for the amendment can be found throughout the specification, and particularly, for example, on page 27, second to last sentence of second full paragraph.

Claims 2-4 and 11-13 have been amended to refer to a “recoding causing sequence” causing an event. The amendment is clerical to give an antecedent basis in the currently amended claim 1 for the terms used in claims 2-4.

Claim 6 is amended to delete the phrase “in one nucleotide.” The amendment supported by the specification as a whole. Claim 6 is further amended to refer back to “a protein encoded by said gene sequence” instead to just “said protein.” This is a purely clerical amendment to remove a recitation lacking antecedent basis.

Claim 9 is amended to specify that the epitope referred to is an MHC I restricted epitope. This amendment is clerical to clarify the antecedent basis of the term in the claim 8.

Claim 10 is amended to identify that after administration of different amounts of compounds the “activation of the epitope specific CD8+ T-cells” is measured to detect changes in recoding efficiency.

Claims 18-20 are amended to refer back to claim 1 instead of claim 17, which is herewith cancelled without prejudice.

New claims 23 and 24 are added herewith to a method of determining novel recoding causing sequences. Support for claim 23 can be found throughout the specification and specifically, for example, on page 15, second full paragraph, and page 20, second full paragraph. An example supporting claim 24, can e found, for example, on page 19 under heading “In vivo priming assays”, which assays are used to measure T-cell expansion.

As specified above in detail, all the amendments are either supported by the specification or merely clerical, and do not therefore introduce new matter. Consequently, the entry of all of the foregoing amendments is respectfully requested.

In response to the October 1, 2002, Final Office Action which issued in the parent application U.S. Serial No. 09/981,393, filed October 16, 2001, applicants submit the following response.

Examiner objected the drawings because of informalities. Applicants respectfully submit a new set of drawings, wherein the informalities have been addressed. No new matter has been added by the corrected drawings and their entry is respectfully requested.

Claims 1-23 were rejected under 35 U.S.C. §112, second paragraph. Examiner contends that the recitation of “sequence suspected causing said recoding” renders claims 1, 8, and 17 indefinite.

Applicants disagree. However, to expedite prosecution, applicants have followed examiner’s suggestion and amended the pending claims to recite to “sequence causing recoding.” Applicants have further cancelled claims 8 and 17 and respectfully request that the cancellation be without prejudice. Therefore, applicants submit that the rejection under 35 U.S.C. §112, second paragraph has been obviated and should therefore be withdrawn.

However, because the invention is also directed to a method wherein sequences “suspected of causing recoding” can be identified and once identified, they can be used in the method of claim 1, applicants have added new claims 23 and 24 to address this part of the invention in separate set of claims.

Examiner also argues that it is not clear as to what the recitation of “recoding of said sequence” in claims 1, 8, and 17 refers to. Applicants have amended claim 1 to refer to “epitope encoding sequence” and “recoding causing sequence” which should clarify the “sequences” referred to in the claim. Applicants submit that the amendment obviates the rejection under 35 U.S.C. §112, second paragraph, and therefore the rejection should be withdrawn.

Examiner further rejected claims 1-7 under 35 U.S.C. §112, second paragraph, because of omission of essential steps. In response, applicants have amended claim 1 to recite to a measurement of activation of CD8+ T-cells compared to a control to determine the efficacy of

the compound in altering recoding in step e). Applicants submit that this amendment obviates the rejection of claims 1-7 under 35 U.S.C. §112, second paragraph, and therefore request that the rejection be withdrawn.

Examiner correctly noted that the limitation "said protein" in claim 6, lacks antecedent basis. In response to the rejection, applicants have amended claim 6 to refer back to "a protein encoded by said gene sequence." Applicants submit that this amendment obviates the rejection and therefore the rejection should be withdrawn.

In view of the above and foregoing, applicants respectfully submit that the claims now on file are in condition for allowance, and therefore prompt and favorable action is requested. Should there be any question concerning this response or the application in general, the Examiner is respectfully urged to telephone the undersigned so that prosecution of this application may be expedited.

Authorization is hereby given to the Commissioner to charge any deficient fees or to credit any overpayment to Nixon Peabody LLP account No. 50-0850.

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Customer No.: 26248

Respectfully submitted,



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